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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/816,510
	Filing Date	April 1, 2004
	First Named Inventor	Evelyn N. Drake
	Group Art Unit	3662
	Examiner Name	Unknown
Total number of pages in this submission	Attorney Docket Number	2003UR021

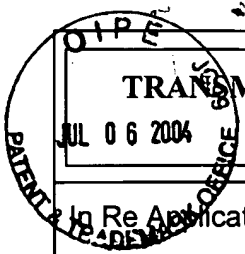
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SIGNATURE OF APPLICANT, ATTORNEY OR AGENT	
Firm or Individual Name	J. Paul Plummer ExxonMobil Upstream Research Company
Signature	<i>J. Paul Plummer</i>
Date	July 1, 2004

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT	
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**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.07(c))

Docket No.  
**2003UR021**

In Re Application Of: **Evelyn N. Drake, Eric B. Sirota, Steve E. Heiney, Warren S. Ross, Donald N. Schulz and Hans Thomann**

Serial No. <b>10/816,510</b>	Filing Date <b>1 April, 2004</b>	Examiner <b>Unknown</b>	Group Art Unit <b>3662</b>
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Title: **METHOD FOR IMPROVED BUBBLE CURTAINS FOR SESIMIC MULTIPLE SUPPRESSION**

Address to:  
**Assistant Commissioner for Patents  
Washington, DC 20231**

**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application; within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or before the mailing date of a first Office Action on the merits, whichever event occurs last.

**37 CFR 1.97(c)**

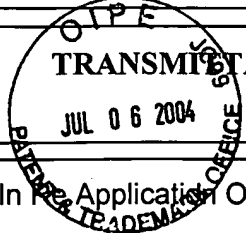
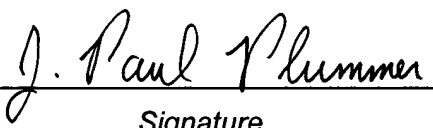
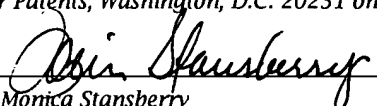
2. ☐ The Information Disclosure Statement submitted herewith is being filed after three months of the filing of a national application, or the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or after the mailing date of a first Office Action on the merits, whichever occurred last but before the mailing date of either:
- 1. a Final Action under 37 CFR 1.113, or
  - 2. a Notice of Allowance under 37 CFR 1.311,
- Whichever occurs first.

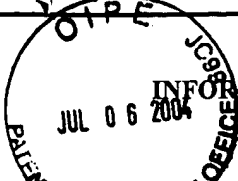
Also submitted herewith is:

- ☐ a certification as specified in 37 CFR 1.97 (e);

**OR**

- ☐ the fee set forth in 37 CFR 1.17 (p) for submission of an Information Disclosure Statement under 37 CFR 1.97(c).

 <p><b>TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT</b> (Under 37 CFR 1.97(b) or 1.07(c))</p>		<p>Docket No. <b>2003UR021</b></p>	
<p>In Re Application Of: <b>Evelyn N. Drake, Eric B. Sirota, Steve E. Heiney, Warren S. Ross, Donald N. Schulz and Hans Thomann</b></p>			
Serial No. <b>10/816,510</b>	Filing Date <b>1 April, 2004</b>	Examiner <b>Unknown</b>	Group Art Unit <b>3662</b>
<p>Title: <b>METHOD FOR IMPROVED BUBBLE CURTAINS FOR SESIMIC MULTIPLE SUPPRESSION</b></p>			
<p><b>Payment of Fee</b> (Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))</p>			
<p><input type="checkbox"/> A check in the amount of _____ is attached.</p> <p><input checked="" type="checkbox"/> The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. <b>05-1328</b> as described below. A duplicate copy of this sheet is enclosed.</p> <p style="margin-left: 40px;"> <input type="checkbox"/> Charge the amount of _____  <input type="checkbox"/> Credit any overpayment.  <input checked="" type="checkbox"/> Charge any additional fee required.         </p>			
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<p><b>J. Paul Plummer (SW-358) Reg No.: 40,775</b>  <b>ExxonMobil - Upstream Research Company</b>          P. O. Box 2189          Houston, TX 77252-2189          Telephone: (713) 431-7360          Facsimile: (713) 431-4664</p>			
<p><u>Certificate of Mailing Under 37 C.F.R. §1.8(a)</u></p> <p><i>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on July 1, 2004.</i></p> <p style="text-align: center;">           _____          Monica Stansberry       </p>			

 <p align="center"><b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)</p>	Docket Number (Optional) <b>2003UR021</b>	Application Number <b>10/816,510</b>
	Applicants <b>Evelyn N. Drake et al.</b>	
	Filing Date <b>04/01/2004</b>	Group Art Unit <b>3662</b>

### U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1	3,084,651	04/09/63	Parmenter, R.	114	.5	
	2	3,739,869	06/19/73	Mayne, H.	181	.5H	
	3	4,045,084	08/30/77	Hsueh et al.	299	4	
	4	4,183,744	01/15/80	Fischer, et al.	75	20	
	5	4,618,024	10/21/86	Domenico, S.	181	120	
	6	4,625,302	11/25/86	Clark, W.	367	24	
	7	5,401,921	03/28/95	D'Antonio et al.	181	286	
	8	5,422,043	06/06/95	Burris, W.	261	122.1	
	9	5,513,149	04/30/96	Salmi et al.	367	1	
	10	5,645,771	07/08/97	Sethna et al.	261	123	
	11	5,959,938	09/28/99	Behrens, W	367	15	

### FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
	12	WO 02/50755	06/27/02	Lee, P.			<input type="checkbox"/>	<input type="checkbox"/>
	13	1,376,513	12/04/74	GB			<input type="checkbox"/>	<input type="checkbox"/>
	14	3,101,566	1982	DE			<input type="checkbox"/>	<input type="checkbox"/>

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	15	(2004) Standard European Search Report #RS 110154, Jan. 28, 2004.
	16	<b>Baird, M. H. I. and Davidson, J. F. (1962) "Gas Absorption by Large Rising Bubbles"; <i>Chem. Eng. Sci.</i> 17, pp. 87-93.</b>
	17	<b>Craig, V.S.J. et al. (1993) "Effect of Electrolytes on Bubble Coalescence", <i>Nature</i> v. 364, 317-319.</b>
	18	<b>Deschenes, L. et al. (1998) "Inhibition of Bubble Coalescence in Aqueous Solutions. 1. Electrolytes", <i>J. Phys. Chem.</i> 102, pp. 5115-5119.</b>
	19	<b>Domenico, S. (1981) "Acoustic Wave Propagation in Air Bubble Streams in Water", <i>SEG 51<sup>st</sup> Annual Int'l Mtg., Los Angeles, CA</i>, pp. 377-398.</b>
	20	<b>Fulton, T. (1984) "Some Interesting Seismic Noises", <i>SEG 54<sup>th</sup> Annual Int'l Mtg., Atlanta, GA, Dec. 2-6, 1984, Exp. Abstr.</i>, pp. 264-267.</b>
	21	<b>Hofmeier, U. et al. (1995) "Observations of Solute Effects on Bubble Formation", <i>J. Colloid Interface Sci.</i> v. 174, pp. 199-210.</b>

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)	Docket Number (Optional)	Application Number
	2003UR021	10/816,510
	Applicants Evelyn N. Drake et al.	
	Filing Date	Group Art Unit
	04/01/2004	3662

### U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

### FOREIGN PATENT DOCUMENTS

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							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

22	Keitel, G. and Onken, U. (1982) "Inhibition of Bubble Coalescence by Solutes in Air/Water Dispersions", <i>Chem. Eng. Sci.</i> v.37 no. 11, pp. 1635-1638.
23	Lessard, R. R. and Zieminski, S. A. (1971) "Bubble coalescence and gas transfer in aqueous electrolyte solutions", <i>I&amp;EC Fundamentals</i> v. 10, pp. 260-269.
24	Marrucci, G. and Nicodemo, L. (1967) "Coalescence of Gas Bubbles in Aqueous Solutions of Inorganic Electrolytes", <i>Chem. Eng. Sci.</i> 22, pp. 1257-1265.
25	Miklavcic, S.J. (1996) "Deformation of Fluid Interfaces Under Double-Layer Forces Stabilizes Bubble Dispersions", <i>Phys. Rev. E: Stat. Phys., Plasmas, Fluids, Relat. Interdiscip. Top.</i> V. 54, no. 6, pp. 6551-6556.
26	Peterson, D.A. et al. (1987) "Bubble Behavior in a Three-Phase Fluidized Bed", <i>Int. J. Multiph. Flow</i> v. 13, no. 4, pp. 477-491.
27	Sagert, N. H. et al. (1976) "Bubble Coalescence in Aqueous Solutions of <i>n</i> -alcohols", <i>Academic Press</i> , pp.147-163.
28	Ueno, N. (1993) "Effect of Porous Materials on the Generation and the Growth of Bubbles in Aeration," <i>Ceramic Transactions</i> v. 31, pp. 343-352.
29	Zahradnik, J et al. (1999) "The Effect of Surface-Active Additives on Bubble Coalescence in Aqueous Media", <i>Chemical Engineering Science</i> , v. 54, pp. 4757-4766.
30	Zieminski, S. A. et al. (1967) "Behavior of Air Bubbles In Dilute Aqueous Solutions", <i>I&amp;EC Fundamentals</i> v. 6, no. 2, pp. 233-242.
31	Zieminski, S. A. and Lessard, R. R. (1969) "Effects of Chemical Additives on Performance of an Air-Water Contactor", <i>I&amp;EC Process Design and Development</i> v. 8 no.1, pp. 69 -75.
32	Zieminski, S. A. and Whittemore, R. C. (1971) "Behavior of Gas Bubbles in Aqueous Electrolyte Solutions", <i>Chem. Eng. Sci.</i> 26, pp. 509-520.

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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